

*Gordon (J. C.)*  
*(Vide Index)* *Billings*

WITH THE AUTHOR'S COMPLIMENTS,

PRACTICAL HINTS TO PARENTS

CONCERNING THE

PRELIMINARY HOME-TRAINING

OF

YOUNG DEAF CHILDREN.

BY

JOSEPH C. GORDON.



WASHINGTON :

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1886.



PRACTICAL HINTS  
TO  
Parents of Young Deaf Children

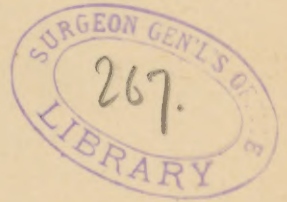
CONCERNING

PRELIMINARY HOME-TRAINING.

BY

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JOSEPH C. GORDON, M. A.

*Professor of Mathematics, etc., in the National College for the Deaf,  
Washington, D. C.*



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*Reprinted from the AMERICAN ANNALS OF THE DEAF AND DUMB for October, 1885:  
Revised and enlarged, with a Supplement.*  
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1886.



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TO  
THE  
MEMORY  
OF  
FRANCIS GREEN, M. A., (HARVARD.)

Author of "*Vox Oculis Subjecta*," London, 1783.

BORN IN BOSTON, 1742: DIED IN MEDFORD, MASS., 1809.



HE URGED THE EDUCATION OF THE DEAF UPON CITIZENS OF NEW-YORK, IN  
1781.

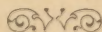
HE PUBLISHED A PLAN AND PLEADED FOR THE ORGANIZATION OF A FREE-SCHOOL FOR  
THE DEAF IN LONDON, IN 1783.

HE SECURED THE FIRST CENSUS OF THE DEAF (IN MASSACHUSETTS) IN 1803-4.

THROUGHOUT THESE YEARS HIS LEISURE WAS EMPLOYED IN "PROPAGATING THE  
KNOWLEDGE OF THE PRACTICABILITY OF THIS EXTRAORDINARY ART" BY  
MEANS OF LETTERS, BOOKS, TRANSLATIONS, AND CONTRIBUTIONS  
TO THE PUBLIC PRINTS OF THE DAY.

FAMILIAR WITH THE METHODS OF AMMAN, OF BRAIDWOOD, AND OF DE L'EPÉE, HE  
FAVORED A COMPREHENSIVE SYSTEM OF INSTRUCTION FOR THE DEAF,  
WHICH WELCOMED ALL KNOWN METHODS AND DISCARDED NONE.

TO THIS FIRST PROMOTER OF THE EDUCATION OF THE DEAF IN AMERICA, WHO  
PLÓWED THAT OTHERS MIGHT SOW AND OTHERS STILL MIGHT REAP,  
THIS PAGE IS DEDICATED.







## PREFACE.

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*These pages have been prepared from the notes of an informal lecture, given in June last, upon invitation of Dr. Alexander Graham Bell, before the "parents' class" in Mr. Bell's school. Through the liberality of Dr. Bell this lecture is to have a much wider circulation than would have been otherwise possible. The original form has been retained for convenience, though this revision embraces considerable additions to the lecture as printed in THE AMERICAN ANNALS, besides a Supplement.*

*For the views expressed the writer alone is responsible, though he has been careful to make no suggestions which are unsupported by weighty reasons or by the authority of professional experts. In fact, the Hints are justified for the most part by observed facts in detail, and experienced educators will perceive underneath the suggestions imperfect outlines of the principles of modern pædagogics in their special application to the training of the deaf.*

*Though addressed primarily to intelligent parents, these outlines may prove useful to teachers charged with the first steps in the education of deaf children whose preliminary home-training has been neglected.*

*Questions and suggestions from various quarters, since the first publication of the Hints, led to the addition of the Supplement, portions of which the writer trusts will be found not destitute of value to many of his professional fellow-workers.*

*References to authorities in detail are not practicable, but the author is under special obligations to the Abbe Tarra, President of the Milan Convention, the lamented Padre Marchiò, Dr. E. Seguin, Dr. Hirsch of Rotterdam, and Professor Goguillot of Paris, as well as to those whose names appear in place upon the following pages.*

Kendall Green,

J. C. G.

Dec. 10, 1885.





## Practical Hints to Parents of Young Deaf Children Concerning Preliminary Home-Training.

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HOWEVER decided our individual preferences may be for favorite solutions of the problems which confront us as educators of the deaf, it is a happy omen that in America, at least, there is no recognized *shibboleth*, and all thoughtful instructors earnestly unite in the prayer for "more light," while they continue to "seek a more excellent way."

Gratifying, promising, and suggestive as individual experiments are which have passed under my observation or come to my knowledge, it seems most fitting that I should confine these remarks, so far as practicable, to buds which have fulfilled their promise in the rich fruitage of matured culture and character.

We generally agree that much may be done at home for very young deaf children in the way of preliminary instruction, and that this home-training is for the most part sadly neglected, though it must be said that increasing numbers of deaf children are receiving home instruction before entering the special schools, and the effect of this course is, in general, both a proof of its value and an encouragement to all intelligent parents to the performance of duty.

As soon as deafness in a child is discovered there is need for the development of dormant powers, not so much, at first, those of the child as those of the parents. They find themselves called to duties before undreamed of, and from which they may naturally shrink, but great will be the reward if they devote themselves courageously to the work before them. To this end it is well to acquire a general knowledge of the current literature pertaining to deaf-mute instruction. This may be found in the educational quarterly entitled *The American*

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*Annals of the Deaf and Dumb.*\* It is well, also, to procure copies of the primary books in language used in our schools for the deaf.† Every one of these little books has merits of its own, and parents can find many helpful suggestions in the authors' introductions. To become familiar with the extreme simplicity of expression to be cultivated when the use of alphabetic language is attempted, such books as these should be studied with care; and further to familiarize one with "simple truths simply stated," such papers for the school-room as *The Helper*, a weekly printed at the Jacksonville (Ills.) Institution, may be read with advantage.

In addition to this special literature, the charming pages of Rousseau's *Émile* and Pestalozzi's *Leonard and Gertrude*, as published recently in abridged English translations, may be read with profit. Parents will find also suggestive and helpful matter in Miss Patridge's *Quincy Methods*, and in Col. Francis W. Parker's sprightly journal, *The Practical Teacher*.

Many of our older institutions used to print, in their reports, instructions to parents,—the Kentucky, Pennsylvania, and New

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\* For articles of special value in this connection see extracts from D. Hirsch's *Advice to Parents*, etc., *Annals*, xxii, 93-103; *Early Home Training of Deaf-Mute Children*, translated from report of the Royal Würtemberg Institutions for the Deaf and Dumb for 1849, xxiv, 9-26; Padre Marchiò on *Respiration*, etc., quoted by D. Greenberger, xxvi, 112-125; *Upon a Method of Teaching Language to a very young Congenitally Deaf Child*, by Dr. Alexander Graham Bell, xxviii, 124-138.

† Jacobs's Learning to Spell, to Read, to Write, to Compose—all at the same Time. D. Appleton & Co., New York.

Keep's First Lessons. Case, Lockwood & Co., Hartford, Conn.

Kinsey's Exercises in Articulation [with language lessons] for Deaf Children. W. H. Allen & Co., London.

Latham's First Lessons. Van Antwerp, Bragg & Co., Cincinnati, Ohio.

I. L. Peet's Language Lessons. [Action and Object-Writing.] Baker & Taylor, New York.

Van Praagh's Lessons for the Instruction of Deaf and Dumb Children in Speaking, Lip-Reading, Reading and Writing. Trübner & Co., London.

Stainer's Hill's Object Lessons and Language Book for Deaf Children, for use with Hill's Colored Illustrations. [Hill's Object Pictures, 24 plates, 384 Colored Illustrations mounted on boards, or in book-form, on cloth.] A. N. Myers & Co., London.

Stainer's Sounds, Syllables, and Words—4 sheets. Deaf Children's Home, 80, Pentonville Road, London.

Miss Sweet's First Lessons. American Asylum, Hartford, Conn.



York being especially full,—and it is to be regretted that this practice has not been followed more generally.

[The speaker here exhibited a manuscript copy of the Kentucky instructions, a recent circular of instructions to parents, guardians, etc., prepared by Mr. Crouter, principal of the Pennsylvania Institution, and the 27th Report of the New-York Institution, 1846, from which he read copious extracts.]

Many of the suggestions just read, if faithfully put into practice, would be of far greater value than anything I can say, but I may add here a few words in regard to the use of signs or gestures, with particular reference to children born deaf or deaf from early infancy. While, for others, the circumstances of each case decide the course to be pursued, for these, the sign-language, in the hands of its masters, is, in my opinion, an invaluable means of instruction, especially in the early stages of their education. By means of it, the skilful teacher annihilates obstacles of time and space, and history becomes a living panorama, every quarter of the globe is transported to his school-room and becomes a present reality to his pupils, the stories so delightful to infancy become a part of their heritage, and the long line of Bible stories, with their sublime lessons, is woven in fadeless colors into their very being. To arouse dormant powers, to convey facts, to interpret relations, to stimulate the imagination, to appeal to the emotions, to regulate the passions, I know of no satisfactory substitute for the gesture language: and thrice fortunate do I count those deaf children whose youthful minds are developed under the inspiration of the able master whose hands pluck the stars from their courses, who brings the rolling sea to his feet, whose arms become trees, and in whose fingers the budding flowers burst into bloom.

The highest interests of the deaf demand, however, intelligent recognition of the fact that this powerful instrument of instruction is liable to be used to their serious detriment by hindering assiduous practice in the use of alphabetic and spoken language, the language of the people among whom the deaf are to live, and instructors well may heed the words of the distinguished Canon Carton, who said, in 1845, that “the results obtained in all institutions which have not adopted the prolonged use of signs testify, in a peremptory manner, against the necessity of their prolonged use.”

Still more pointed are the utterances of Dr. E. M. Gallaudet.



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who, holding that the sign-language has an essential and by no means narrow place in any broad and sound scheme of education for the deaf, at the same time warns instructors against the use of signs, except in those cases where it is absolutely essential and best for the mastery of our language, as a dangerous thing, and would have pupils in our institutions use the sign-language under rigorous restrictions. Dr. Gallaudet says :

—“ if we want the children of our institutions for the deaf and dumb to master the English language, what have we to do with the sign-language? I answer, *as little as possible*. I would not be misunderstood; there are uses to which the sign-language is put that are invaluable, and while I say that the education of the deaf and dumb child *may* be conducted without the sign-language, I do not say that it can be best done without the aid of the sign-language.”\*

This admitted tendency to the unnecessary and pernicious use of signs, which needs to be so jealously guarded against especially by teachers who are adepts in the sign-language—whose chief business should be the teaching of the national language as a means, and not as an accomplishment, or an end,—should not deter any intelligent parent from using signs in this early and preliminary stage of the child's education.

All authorities of recognized prominence in the world permit, if they do not commend, the use of signs at this stage adapted to the degree of the child's mental development.

Thus the Abbe Tarra, the foremost authority upon *il metodo orale-percettivo puro*, in his exposition of this method, says of the period before the mechanism of speech has been mastered: “It is permitted, however, during this preparatory period, to the deaf-mute remaining in his natural ignorance, to serve himself, for his restricted physical and moral needs, with the signs and indications which he originates, guarding, however, carefully against furnishing him with occasions for increasing their number and forming them into a language.”†

But what signs are available for the parent who is not, and cannot be expected to be, a master of the language of gesture?

I would suggest:

1st. The facial signs and the gestures which mothers use

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\* Proceedings 7th Convention of American Instructors, 1870, pp. 25, 60-67.

† *Cenni Storici e Compendiosa Esposizione*, 1880, p. 14; French tr., 1883, p. 18.

almost unconsciously, and which all children read, expressive of pleasure, pain, approval, disapproval, fear, fatigue, desire, etc.

2d. Gestures descriptive of things and suggestive of actions, often made by persons of demonstrative habits and commonly understood by all men.

3d. Such signs as persons having no common language might resort to in trying to make themselves understood.

4th. Any decorous signs used by the child or understood by him which serve to recall an idea with ease and rapidity.

I have purposely omitted all reference to the sign classifications which have done duty in many a wordy battle and are of interest chiefly to metaphysicians. For our purpose the principal requirement is that the sign shall designate a known idea with reasonable clearness, and that it shall be composed of so few elements as to serve the purpose of rapid recall.

Trained intellects require formulæ and symbols, as in mathematics, chemistry, and music, to convey thought through the eye in a condensed form. Ideas which could hardly be conveyed at all by alphabetic language when thus expressed are seized readily and rapidly. Very much in the same way and for the same reason the little deaf child requires signs as symbols in the apprehension and expression of related thought.

The deaf child sees and feels as other children do, and imagines, remembers, compares, forms judgments, etc., but upon very imperfect data: hence it is important to cultivate and enlarge his means of communication, to encourage his mental activity, and to pursue a course which will give us an intelligent child to deal with when we advance to conventional and alphabetic language.

No parent need fear that the knowledge and even extensive use of gestures must of necessity prevent the acquisition of our vernacular. There are living examples of deaf-born persons, largely pupils of early American instructors, who habitually express their thoughts by writing or finger-spelling in idiomatic English, of which no man need be ashamed. And under favorable conditions with the super-added advantages of oral training, we may expect even greater attainments by greater numbers. It is a well-known principle that the knowledge of one language does not prevent the mastery of another, provided the latter is persistently used; and just as Celtic or Gaelic or German spoken by children at home yields to English taught and spoken in the schools, so may the language of gesture be

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made to yield to our vernacular, when, realizing the importance of it, teachers and pupils resolutely work to accomplish this end.

Having, then, a means of communication which you may feel free to use, let no time be lost before you begin the moral training of the child. As he is a keen observer of outward actions around him, there is special need on the part of the family to set him a good example. Deal with him firmly, gently, and lovingly, granting him no improper desire. The child's sense of right and wrong requires judicious training. It is closely allied with his sense of giving pleasure or pain, and this affords the clue to its proper development. The idea of ownership is usually manifested very early. Respect the property rights of the child, and train him to respect other persons' property. Train him to confess his faults manfully, and to avoid evasion and concealment, so often born of fear. In this, example may prove very effective, especially if there are brothers and sisters in the family. Prompt obedience is to be aimed at, but your point of view may be so very different from the child's that often the end may be best gained by patiently waiting for compliance. If correction or punishment must be resorted to, let the case be clear to the child, the penalty equitable, and administered in private so far as possible, and with a loving heart.

Absolute seclusion of the child as a punishment should be avoided. The risk of harm is great, the benefit often doubtful, and the hardship, in the case of a deaf child, is especially severe.

A busy boy is rarely a "bad" boy. He should have his round of daily duties, for occupation and for the moral stimulus arising from the consciousness of being intrusted with responsibility. A share in the care of the household "pets" may be assigned him.

The child's sympathetic impulses should be cultivated through the influence of example, and he should be encouraged, by degrees, to share his possessions and to make little sacrifices for the poor, the sick, etc.

Habits of neatness and order should be carefully instilled. He should not be helped to do what he can do for himself. He should learn to dress and undress himself, for example. Social habits should be encouraged, and the whole family (together with such children as one may borrow) should devote a part of each day to little games in which all may take part.



It is well for him to visit churches and art galleries for their paintings, and pictorial Bibles and selected illustrated papers may be placed in his hands.

Janet Byrne's *Picture Teaching* is excellent in its way, and may be used with profit in passing to printed language.

The whole matter of picture-teaching is deserving of serious attention. It was probably the chief reliance of many of the early unrecorded teachers of the deaf. In using pictures it is important to supply action where intended, and to give correct ideas as to size, by means of gestures.

The child is naturally full of activity, and the parents should take advantage of this for educational ends. In the early stages this "action-work" should be imitative. These imitative exercises may include standing up, sitting down, walking, running, hopping, jumping, bringing, taking, touching, pointing, looking, opening doors, windows, and books, and closing them; gymnastics of the arms, head, hands, fingers: closing both eyes, closing one, alternate winking, etc.

Before a long, narrow mirror, in which the child can see the lower part of your face and his own, mouth and tongue movements may be practised with great advantage. Open the mouth as wide as possible, and repeatedly. Decrease the opening. Practise various mouth movements, as in uttering simple syllables and elementary sounds. Extend the tongue as far as possible, retract it, try successive positions against the upper teeth, the lower teeth, etc., remembering that the tongue unused for speech is a clumsy member.

Go over these different classes of imitative exercises repeatedly, slowly, rapidly, and irregularly, making of them a game or play for the child, who is to imitate closely all your movements.

Since ordinary children understand a hundred or more of words, and sometimes scores of sentences, long before they can talk, you may try spoken commands with the deaf child, to be caught from the visible movements of the mouth and adjacent parts if possible, though in case of hesitation gestures may be used simultaneously. The commands should be so arranged as to present great dissimilarity to the eye. You may try such orders as Shut the door, Open the window, Come to me, Stand up, Bring me the newspaper, Sit down, Touch your lip,—thumb,—face,—tooth,—foot,—nose, etc., etc.

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These little commands may and should be repeated thousands of times, and explained, when necessary, by action, or by gestures.

It will greatly facilitate these first steps if a hearing child or group of hearing children can act the part of leader or leaders in imitating your actions and in obeying your orders.

By imitation first, and afterward in response to commands, the hands should be trained to their wonderful movements, remembering that although the hand is not the brain nor the brain the mind, yet hand-training is brain-training and brain-training is mind training. These manual exercises should include holding passively and taking hold actively, lifting, grasping, throwing, catching, collecting, compressing, breaking, modelling, grouping, connecting, fastening, separating, dividing, cutting with knife, scissors, and saw, using a hammer, pulling up, pulling down, pulling away, delineating, using the pen, etc. Each of these terms might be expanded into a chapter. The influence of these exercises upon the mind has been admirably set forth by Dr. E. Seguin. Their intellectual value is beyond all computation. If the child passes through the series easily the acquired accomplishments are a sufficient compensation for the time spent upon them; if he advances slowly and awkwardly there is special need of all the mental training to be obtained in this way. This hand-training, leading to useful activities and mental development, points toward many of the occupations which have been elaborated in *Kindergärten*, though originally employed as educational expedients in schools for deaf children.

The deaf child should have his flower pots, or better still, his garden spot, where he may dig, plant seeds, and watch their growth. Secure fragrant flowers for him, and let him learn to distinguish their odors.

In the course laid down the eye has had training, but this should be extended to specific exercises in identifying forms, matching colors, comparing lengths, sizes, etc., and should be continued until the perception of minute and almost microscopic forms and movements has become habitual.

When the eye has been well trained to habits of observation the attention may be directed to the respiration. The breathing of deaf-mute adults is generally very defective, ranging from 24 to 28, where normal respiration is from 14 to 20 times per minute. In deaf children, slow and deep breathing may be made

habitual by the frequent repetition of very carefully graduated exercises, and by cultivating a suitable carriage of the shoulders, which should be habitually held up and somewhat thrown back.

The slow inflation of little silk or toy balloons is an attractive and useful exercise, and the blowing out of lighted candles, which is an invaluable exercise, should be practised at various distances until the child can extinguish the light at a distance of at least 40 or 50 centimeters—15 or 20 inches—from the mouth.

The sense of touch or muscular feeling must assist the sight in securing a good respiration. The child's hands should be placed upon your thorax and upon his own, until he notices and successfully imitates the play of your lungs.

You can readily devise exercises in breathing through the mouth alone, the nose alone, in alternation, and in reversing the inspirations and expirations through these channels. The exercises may be directed by movements of the hand, and may be slow or rapid, gentle or forcible, continuous or interrupted, uniform or variable, but must never be violent.

When the intelligence has been well developed, the child will be apt to manifest a strong desire to know something of conventional language, and he is in a condition to begin to acquire our vernacular. To accomplish this thoroughly in its written and spoken forms requires the skilful and patient use of all the resources at the command of experienced special teachers of the deaf. Though correct language and perfect speech require the scientific specialist, the rudiments of intelligible language and intelligible speech may be imparted generally by any patient, painstaking, and intelligent parent. Every deaf child may not succeed in acquiring speech, but the instances in which even backward and unpromising pupils have succeeded finally should encourage parents to persevere in the earlier stages of voice and speech development. If the preliminary course outlined in these notes has been faithfully followed, many little sentences and phrases accompanying present objects, actions, and qualities have been repeated to the deaf child many thousands of times, they have been largely comprehended, and he has made a little progress in the art of speech-reading, or "lip"-reading, as it is sometimes, misleadingly, called. Outlines of syllables, words, and sentences have been photographed upon his memory, and he is prepared to begin to utter syllables, elements, and words.

Optical images of definite muscular movements, associated



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with sensations of internal touch and with an appreciable control of the current of air passing from the lungs, form a three-fold cord which binds in memory the deaf child's conception of syllables. By imitative efforts before a mirror, by chance, or by careful adjustment of organs, the child with some experience in speech-reading will be apt to utter syllables. These should be noted at once, and repeated till fixed in the child's memory; others will follow, and finally speech may be built up. By this method the elements are obtained chiefly from syllables. The older and still prevalent custom is to secure elements first, to be combined afterwards into syllables and words.

Recognizing the importance of written language in itself and as a means of instruction, and the great convenience of manual alphabets for the rapid expression of our vernacular, I yet hesitate to recommend their introduction, or extended use at least, until considerable progress has been made in speech-reading. From theoretical considerations I place speech-reading first in time, oral speech second, and written language third, and this is the course pursued with striking success by the veteran Hirsch in Holland, practised in Italy, and undergoing the test of encouraging experiment in certain schools in America.

The need for alphabetic language is so great, the temptation to begin its use is so strong, and the progress in it is so apparent, that parents will be apt to introduce it earlier than, in my opinion, is expedient. If this course is decided upon, very encouraging results\* may be secured by connecting simple written language directly with designated objects and actions, as in the directive action-work before outlined.

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\* The following case is cited as an example of what a parent has done in the face of discouragements which need not be related here. Dr. F. L. Radcliffe, now residing in Washington, is the father of two bright and interesting little ones, who have never heard. Though unfamiliar with deaf-mute instruction, he decided to begin teaching written language to the elder child, using largely for this purpose cards or paper slips. I take pleasure in recording an almost complete list of the verbal contents of this deaf child's mind, though I regret that I cannot give the order of acquisition. Dr. Radcliffe, guided by his experience and present knowledge, would probably now pursue a more fruitful course, but I have been unable to find any record of greater verbal attainments by a deaf-born child of the same age. *This list was mastered by a little boy four years old:*

Aunt Libbie, Aunt Sadie, Fannie, Grandpa, Grandma, Papa, Pierson, Reba, Baby. Arm, ass, ball, bath, bed, bib, bird, book, bowl, bread, broom, brush, butter, cat, chair, clock, coat, comb, cow, cup, cuspidore,

Parallel with written language, some form of manual alphabet may be introduced. A singular, yet wide-spread misapprehension in regard to the manual alphabet leads me to remark that finger-spelling is merely one way of writing our language without pen, ink, or paper. Finger-spelled\* English has in its favor, as compared with writing, convenience, legibility, and rapidity, hence it is a very useful adjunct to spoken English. Practice in finger-spelling is practice in English.

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dog, door, drink, ear, eye, face, floor, foot, fork, goat, hair, hand, head, hen, horse, ink, kiss, knife, leg, lie, milk, mouth, mucilage, nose, pants, parasol, pen, pencil, pig, plate, rooster, scissors, sheep, shirt, shoe, sit, slate, sleep, spoon, stand, stockings, table, towel, tree, turtle, velocipede, wagon, walk, wash, water, window. Large ball, small ball, large table, small table, large chair, small chair.

Papa's bed,—chair,—hat,—shoe. Pierson's bed,—chair,—coat,—face,—hat,—shoe. Baby's bed,—chair,—coat,—face,—hat,—shoe.

Shut the door, Open the door, Go down stairs, Go upstairs, Open the book, Shut the book, Sit on the floor,—chair,—bed, Walk to the large table,—small table.

Bring me a large ball,—a small ball, Give Baby a large chair,—a small chair, Bring me the scissors, Kiss Baby,—Grandma,—Grandpa,—Fannie, Go to bed.

\* The highly satisfactory results obtained by David E. Bartlett, of fragrant memory, who opened a private "family school" in 1852 to demonstrate the advantage of the early instruction of deaf children, make Mr. Bartlett's methods worthy of investigation and thoughtful consideration. Mr. Bartlett, though using the language of pantomime with extraordinary power himself, was ardent and enthusiastic in promoting the use of manual spelling and writing by his pupils, many of whom eventually gained an unusual command of English. A few have even won distinction in the higher walks of life.

Mr. Bartlett received into his school, incidentally, a number of young, hearing children, generally relatives of his deaf pupils, who became proficient in the use of the language of signs, thus making "genuine comradeship" practicable. Mr. Bartlett said of this feature of his school: "We find this beneficial to both classes—to the deaf-mutes in enlarging their scope of thought by bringing their minds into contact with those of their more favored companions; beneficial yet more variously to those who hear and speak, quickening their perception, and improving their mental development by presenting to their minds language under entirely new forms; by the use of the manual alphabet in spelling words; and also by the by no means inconsiderable advantage of improved ease and expressiveness of manner, induced by practice in the use of gesture language." It is a matter of regret that the details of this experiment have not been recorded, and it is hoped that this note may call out useful reminiscences from certain of Mr. Bartlett's pupils.

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In any case, and at every stage, talk and chatter and babble (and, if you prefer, also write or spell manually) to the child without ceasing and with endless repetition; but time is too precious for you to do this at random. Limit yourself to a very small and carefully-chosen vocabulary, which should, of course, be noted down in a convenient form for ready reference.

After the child has acquired facility in observation and can express his ideas by means of gesture, modelling in clay or with molding sand, drawing, and oral or written language, the parent may introduce "number-work," using for the purpose a great variety of objects, such as blocks, sticks, beans, marbles, small coins, and all objects used in teaching form. The forms should be painted so that groups of various colors may be used. The first year's work in number should be limited to teaching numbers from one to ten. Col. F. W. Parker remarks in reference to number-teaching in the public schools: "How long it takes to teach ten I cannot yet tell. I have yet to know of an instance of ten being thoroughly taught during the first school year."

However trite and trivial on the one hand, or novel and difficult on the other, these suggestions may appear, I am fully persuaded of the importance of the underlying principles, and in the absence of a more thorough exposition I would urge upon intelligent parents a rigorous application of these hints.

If two hours cannot be set apart to this duty every day, take one hour. If this is impossible, surely one-half hour may be devoted to the work, even by very busy parents. It is best to divide the time into five or ten-minute exercises throughout the day, if it is practicable to do so. These exercises should be briskly conducted and invariably made a source of pleasure to the child.

Do not be anxious over-much for speedy results, but in all things "let patience have her perfect work."

In giving specific directions, or even defining a course of procedure, I have gone outside my province, but I cannot too strongly remind you of your duty to your deaf child, of the almost criminal neglect too often practised, the strong encouragement you have to hope for gratifying progress, and the incalculable value of this home training preliminary to the ordinary course in the special schools.

In recapitulation and conclusion let me call your attention to these points:



1st. As soon as deafness in a child is discovered, the parents should familiarize themselves with the literature of deaf-mute instruction, they should study infantile thought and infantile expression, and prepare themselves to enter, *con amore*, into the little child's world.

2d. They should cultivate their powers of gestural and pantomimic expression, and encourage the child in his little attempts at communication.

3d. The deaf child is to be thoughtfully included in the social life of the family, and to receive careful moral training. Occupations, games, etc., are to be carefully sought out in which he may take a part and feel a responsibility.

4th. Pictures, explained when necessary by pantomime or gestures, are to be extensively used, to recall ideas and to enlarge the child's horizon of knowledge. Real things, however, should be presented before and in preference to pictures, when practicable.

5th. Imitative exercises in great variety are to be assiduously and repeatedly gone through for occupation, development of functions, and training of faculties.

6th. Action-work in response to commands is to be thoroughly practised as leading to higher mental development, and this is to be extended till the deaf child's organs respond readily to mental stimulus.

7th. Our language is to be introduced by the unceasing repetition of simple sentences, phrases, and words, in the presence of objects and actions, and is to be finally seized by the sight, comprehended, and remembered by the child.

8th. The child is to be encouraged to utter and repeat, by syllables rather than by elements in the first instance, little words, from which his speech may ultimately be built up.

9th. The physical welfare of the deaf child should by no means be neglected, but no parent should be satisfied to let his deaf child simply vegetate until he is old enough to enter a special institution.

10th. The application of these principles in a systematic manner will aid in rescuing deaf children from the isolation to which they are too often condemned at home, and will virtually add from one to five years to their intellectual life, besides broadening and deepening the foundation upon which the work of the special school is to be built.



## SUPPLEMENT.

### I.

The foregoing pages relate chiefly, but not exclusively, to children born deaf, or deaf from early infancy, but careful investigations indicate that more than two-thirds of the pupils now in our special schools were not deaf-born,\* and that a very large proportion acquired speech before the loss of hearing. There is, therefore, a much larger group requiring special training than has had especial consideration in the preceding paper, and, in response to requests, it is proposed to add a few hints relating more especially to this very important group.

When deafness follows acute disease, months and sometimes years intervene before health is re-established, and before all inflammatory action in the region of the ears disappears.

This period of convalescence calls for very great devotion, ingenuity, and perseverance in the parents, *who should plan, and begin without delay, simultaneous courses of exercises in speech and speech-reading, and a parallel course of physical training.* Parental neglect in the early stages of this period can be atoned for rarely, if ever, in after years, even under the most skilful training

Thoughtful parents will use their utmost ingenuity from the very beginning of the child's convalescence in calling into constant exercise the child's speech,† which should be regarded as

\* "This proportion of about one-third of deaf-born to those whose deafness is due to subsequent accident exists almost everywhere," says the Abbe Tarra in his *Opening Address*, May 31, 1881.

The following statistics are partly from institution reports and partly from the *Am. Annals* for April, 1885. Examples of relative number of pupils reported as deaf-born to the total number of admissions:—

20	out of	241	admitted to	West. N. Y. Institution	since 1876.
123	"	461	"	Ohio Institution,	in 7 years.
157	"	521	"	Penn. Institution,	in 9 years.
88	"	272	"	six Institutions	in 1873.

† Parents engaged in building up voice and speech without any special training themselves will find helpful suggestions in Miss L. Moffatt's *Voice, Alphabetics, and Language*; *Am. Annals*, xxx, 111-120; 251-259.



the basis and chief instrument of his further education. This practice is not merely invaluable as tending to preserve voice and speech, but the safety of life may depend upon the ability to shout or call out in emergencies. The child should be induced to use his voice as much as possible in speaking, in calling to persons at a distance, in singing, in laughing, and in imitating sounds made by animals and other remembered sounds.

The impress upon the brain and influence upon the mind due to having heard and understood speech is, in the writer's opinion, rarely, if ever, completely obliterated, *but there is great danger of the convalescent child's forgetting very quickly the muscular adjustments for uttering words.* This is the reason that it is so important to induce him to practice speech at once, and incessantly, until the recollection of spoken words can be impressed upon the mind as connected with tactile and muscular sensations of the vocal organs.

If, after speech has been acquired, the hearing is impaired or destroyed without further privation of faculty or function, too great importance cannot be attached to early and persistent practice in speech-reading. This may be entered upon by repeating to the speaking deaf child any little sentences, rhymes, short stories, etc., with which he may be already somewhat familiar, and having him repeat the words after you. Take the sentences he catches best and transpose or substitute familiar words in them. Gradually separate the speech-reading into practice upon familiar syllables in familiar words. From recognizing syllables after a great deal of practice upon them, the recognition may be carried to the visible appearance of separate elementary sounds. Meanwhile, depend upon speech-reading for the names of familiar articles of food and of dress, the names of members of the family, etc. At the very outset imitative action-work may be practised as heretofore outlined, but the transition to action-work in response to spoken commands should be made as soon as possible for the sake of exercise in speech-reading.

The large number of cases in which an invaluable degree of speech-reading has been acquired through care and practice, at home, justifies all the attention that parents can be induced to give to this important subject.

Much has been done, but more might be accomplished, especially in the <sup>case</sup> of speaking deaf children, if they were

led to devote as much time and interested attention to speech-reading as, for instance, thousands of hearing children are required to devote, daily, to practice in music.

The mental power to be cultivated, upon which success in speech-reading depends to a large extent, is *the wide grasp of the attention in its transition over a number of fleeting details rather than that of great power of concentration*. And this is in accord with the mental habits of versatile childhood.

To aid the child, speech should be addressed to him constantly by the household and by visiting friends. Incorrect, careless, and slovenly pronunciation should be avoided. Words should not be "mouthed," but the lips should move freely and the teeth should be separated whenever possible. The face of the speaker should be in a good light, so that the muscular movements from the eyes to the neck may be seen, while the mouth is the special object of scrutiny.

The Abbe de l'Épée, in his treatise for parents upon speech and speech-reading forming the second part\* of his *True Method*, etc., published in 1784, remarks: "1. It almost always suffices an intelligent deaf-mute scholar to perceive part of the syllables of a word, and then a phrase, to enable him to make out the rest. 2. Continual practice with their friends at home very much facilitates their being understood. 3. If the deaf and dumb do not understand as much as they might, it is not their own fault, but rather that of the persons speaking before them, who do not take the measures they might to make themselves understood."†

Professor Bell who has devoted much careful investigation to the subject of speech-reading, remarks:

"I have lately made an examination of the visibility of all the words in our language contained in a small pocket dictionary, and the result has assured me that there are glorious possibilities in the way of teaching speech-reading to the deaf if teachers will give special attention to the subject.

"One of the results of my investigation has been that the ambiguities of speech are confined to the little words, chiefly to monosyllables. The longer words are nearly all clearly intelligible. The reason is obvious, for the greater number of elements

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\* Francis Greene's trans., reprinted in *Am. Annals*, xii, pp. 61-83.

† *La Véritable manière*, etc., p. 215.

there are in a word the less likelihood is there that another word can be found that presents exactly the same outline to the eye. We need never be afraid, therefore, of using long words to a deaf child if they are within his comprehension. We are apt to have the idea that short words will be simpler, and we sometimes try to compose sentences consisting as much as possible of monosyllabic words, under the impression that such words are easy for the pupil to pronounce and read from the mouth. It is more common, therefore, to present such sentences to beginners than to more advanced pupils. Now, I do not mean to say that these sentences may not be easier for a child to pronounce, but the words used are the most ambiguous to the eye. Such a simple word as 'man,' for instance, is homophenous with no less than thirteen other words." \*

When a word or syllable is not caught correctly by the eye, do not dwell too long upon it, as it may so closely resemble other forms as to be peculiarly difficult. Do not resort to any substitute for speech-reading in communication except in case of absolute necessity. If the child has learned to read, let him read occasionally a paragraph without committing it to memory, and then have him repeat it from "seeing the words upon your lips." If he can write, he should make a list of words which appear alike to him as spoken, and if any of these finally prove easy of recognition they may be checked off his list.

Gradually, unknown words and syllables may be introduced, and by proceeding carefully from the known to the unknown by almost imperceptible advances, using speech always, and resorting, in addition, to writing or to finger-spelling only in case of absolute necessity, speech-reading may become the habit and the chief dependence of the speaking deaf person.†

If the speaking deaf child cannot read print, he may make a beginning by using Mrs. Rebecca D. Rickoff's fascinating chart-primer and then using a number of other primers, such as Monroe's, Swinton's, and Butler's, before passing to any "first" reader. If he can read, it is desirable to give him practise in pronunciation, making use of pronouncing spelling-books for

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\* *Fallacies Concerning the Deaf*, Alexander Graham Bell, Ph. D., *Am. Annals*, xxix, pp. 40, 41.

† For an interesting article showing the value of speech and the great utility of even inexpert speech-reading, see a paper by Professor Hotchkiss, of the National College, in the *Annals*, xv, pp. 139-141.



the purpose. Reading-books, printed in type slightly modified to indicate the pronunciation, as in the Leigh system, may be used with profit, but the transition to the use of a dictionary with the ordinary diacritical marks should be made very early.

The parallel course of physical training to re-establish and maintain health of body and of mind should be insisted upon.

In general, regular, daily, and somewhat brisk out-door exercise of not less than three-quarters of an hour should be required unless prohibited by a physician. Sensible in-door gymnastics should be practised regularly and systematically. Mr. William Blaikie's little book, *Sound Bodies for our Boys and Girls*, may be recommended safely as a capital guide. The exercises are free from risk, not over-severe, easily learned, and quite inexpensive.

Diseased and discharging ears require careful attention, which should be given under the advice of an aurist of established reputation when practicable.

The hearing, also, in all cases of deafness, should be tested with care from time to time. Total deafness among "deaf-mutes" is rare. A very slight degree of hearing is of some use, and a much less degree than aurists generally suppose to be of any educational value often proves a great help in acquiring or retaining speech.\*

If the child turns at the ringing of a hand-bell concealed a foot or more behind him, or if, blindfolded, he can distinguish any vowel sounds, cautious and diligent use should be made of a flexible, conical ear-tube. Experiments should also be made in speaking into the open mouth through a funnel-shaped instrument, or horn, as was practised with success in some cases a century or more ago.† It is hardly necessary to caution sensible parents against buying any "aid to hearing" before careful

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\* See "*The Aural System for the Semi-Deaf*," a condensed history of the course pursued and system developed, from early in the year 1880, in the Nebraska Institution, under Mr. J. A. Gillespie, *Annals*, xxix, 185-190; also, *Preliminary Report of Committee on the Hearing of the Deaf*, *Annals*, xxx, 59-69; *Tests of Hearing*, by F. D. Clarke, *Annals*, xxx, 149-155; *Aural Development at the N. Y. Institution*, by E. H. Currier, *Annals*, xxx, 131-134.

† Pietro de Castro's *Moyen de rendre la Parole et l'ouïe aux muets et au sourds*, Avec des Observations sur ce sujet, par Philip Jac. Sachs de Lewenhaimb, [*sic*], in M. Eidous's *Mémoires Littéraires*, 1750, p. 173.

and satisfactory trial. In fact, almost all kinds of "aids" should be tried, as something may be found adapted to the particular case.

It often happens that there is, with use, a decided improvement in the capacity to distinguish sounds, and sometimes favorable changes occur in the hearing apparatus itself. These facts have led to patient experiments in "aural training," and in certain of our institutions a few pupils are now graduated as simply "hard-of-hearing" speaking persons who would have been sent forth a few years ago as "deaf and dumb." Indeed, Miss Mary McCowen, an efficient assistant in Mr. Gillespie's early experiments, has now a private school in Chicago, Illinois, reported to be in successful operation, devoted chiefly to the special training of very deaf children. The need of appropriate special training by experienced instructors, in case the hearing is impaired in both ears to any considerable extent, is as great as if the deafness were total. In many cases of this kind the intellectual training proceeds more slowly at first than with the stone-deaf.

Parents should have the eyes of deaf children examined by an oculist, as deafness is frequently accompanied by unsuspected defective vision, which may be remedied, or by weakness of the eyes, which may be treated with success. As the eyes of the deaf have to do double duty, too great precautions cannot be taken to guard them from injury in ordinary use.

## II.

To encourage parents who may not feel competent to pursue the somewhat exacting course indicated in the preceding pages, and to incite them to do what is clearly within their power, as well as to supplement many deficiencies in the hints heretofore given, the following extracts from publications or from correspondence are submitted.

The Report of the New-York Institution for 1845, to which allusion has been made, devotes fifteen pages to very explicit suggestions to parents. Dr. HARVEY PRINDLE PEET, who should be held in grateful remembrance among the first and greatest of American instructors of the deaf, was the President of the Institution, and, doubtless, the author of this valuable Report. In his introductory remarks, designed to encourage and stimulate parents, Dr. Peet says :

It is very important that deaf-mute children should receive, in the tender years of infancy and childhood, a share of that family instruction from which they are now to a melancholy extent excluded. It is this exclusion to which they are condemned, far more from the ignorance of their relatives of the proper means of communicating with the deaf than from the inability of the latter to hear the words of instruction and admonition addressed to their brothers and sisters, that makes their lot so peculiarly desolate, and that must be regarded as the main cause of the intellectual inferiority of so many educated deaf-mutes as compared with well-educated persons, whose progress in the acquisition of language and of knowledge through language dates from the cradle.

Mr. JOHN A. JACOBS, "the De l'Epée of Kentucky," in one of his early reports, prefaces his Instructions to Parents by saying :

There is no mystery nor any great difficulty in beginning the education of deaf-mutes, as is commonly supposed ; the difficulty lies in the after progress. The first steps are simple and easy enough, and within the ability of almost any person who will attempt to master them.

Mr. D. E. BARTLETT, the pioneer in the work of instructing very young deaf children, speaking from experience, says :

The progress of deaf-mute children in mental development and in the acquisition of knowledge, even of those endowed with the best natural powers, *is greatly retarded* by their *isolated* condition at home, although surrounded by the most intelligent, well educated, and affectionate parents, brothers, sisters, and friends. They have no intelligible medium of communication with those whom they most love and most desire to communicate with. They have no language by means of which to mingle their thoughts and feelings with the dear members of the family



circle. Thus they remain in a measure *strangers* in the bosom of their family! Thus they remain till their childhood is well-nigh past, NEEDLESSLY IGNORANT OF THE SIMPLEST ELEMENTS OF WRITTEN LANGUAGE; QUITE UNINFORMED OF THE CONDITION OF THE WORLD BEYOND THE SCOPE OF THEIR IMMEDIATE OBSERVATION; UNPRACTISED IN A THOUSAND LITTLE EXERCISES OF MENTAL IMPROVEMENT ADAPTED TO THEIR YEARS, AND IN WHICH, AS WELL AS ORDINARY CHILDREN OF THEIR AGE ARE, THEY MIGHT BE ADVANTAGEOUSLY INSTRUCTED.

*Now, all this ought to be changed.* Let the little deaf-mute be instructed in the use of letters in the formation of words. Let the brothers and sisters acquire, as soon as practicable, a knowledge of gesticular language, so as to be able to communicate with him, and to explain the meaning of words as fast as he can learn them, and thus put him in the way of acquiring a language by which he may express his thoughts, begin to understand books, and prepare for future more extended improvement.

Professor PAUL BINNER, the principal of an oral school for deaf children in Milwaukee, Wis., in a paper upon the *Home Training of Deaf-Mute Children*, in considering the duty of parents to the deaf child, makes a number of very practical suggestions, and in unmistakable terms expresses his appreciation of the invaluable importance of gesture language within certain limits. Mr. Binner says:

Unpleasant habits, which necessarily follow the want of hearing, should be prevented or overcome, such as a slouchy, noisy gait, audible breathing, groaning, excessive screaming, handling chairs and other articles in a boisterous manner, slamming the door, smacking the lips while eating, etc. The deaf-mute cannot hear the noise he makes, therefore the parents must draw his attention to it and make him conscious of the unpleasant nature of such habits.

In order to accomplish this, a means of communication is necessary. Through the ear the child cannot be reached; the eye is the only channel through which communication is possible. In the same manner, as we *say* everything to the hearing child, we must *show* everything to the deaf child; therefore we communicate with him by means of signs and gestures. As soon as the intellectual faculties awaken in the deaf-mute, the eye carries the images of things and actions to the brain, where they are shaped into ideas; but these ideas are not produced as in the hearing child, which associates words with the conceptions, for the deaf-mute thinks only in images and pictures. We reach the intellect of the hearing child, while it is yet unable to speak or to understand language, by means of signs and gestures, using the hands, arms, the head, and facial expressions for the purpose, and the child uses the same means of expressing ideas. Its motions toward the door when it wishes to be taken out, claps its little hands to show delight, etc. The same means must be adopted for the deaf child, and its gesture language cultivated, enlarged

improved, for it is the only means of reaching and developing the intellect. As the child grows older and its understanding better, these signs and gestures will be improved upon by the child and new ones added. Such changes and additions should be carefully noted by the parents, in order to be able to meet the intellectual advancement of the child. The more a deaf child is treated like a hearing child the more it will grow intellectually. We play with the hearing child, sing to it, talk with it. Do the same with the deaf child. The fact that the child cannot *hear* should not exclude the little one from pleasant and instructive pastimes; they are not practised in vain, for the deaf-child can *see*, and that is the key to its brain. The actions which the child sees, the daily routine work of parents, brothers, and sisters, watching the latter at play, and, when old enough, participating with them, the use of building blocks, pictures drawn on a slate or paper, be they ever so crude; in short, all that we would do to interest a hearing child tends to awaken the intellect, cultivates the perceptive power, and trains the muscles. All these prepare the child for the future school education. But the most important part of home training, in connection with gesture and other means, is *the constant use of spoken language*. The infant will not be able to imitate the movements of the lips, but as physical and mental development progresses, the child will become conscious of and familiar with the action of the lips and tongue, and in time learn to imitate what it has seen so often, and gradually get an idea of spoken language. This idea of spoken language, of sound emitted during the movements of lips and tongue, can be best brought to the consciousness of the child by frequently placing its hand against the throat of the speaker, where the vibration caused by speaking will be plainly felt; placing the other hand on the child's throat will be apt to cause it to imitate the action. In cases where a deaf child uses the voice but very little, the opportunity should be made use of, and when it cries, laughs, or utters any kind of sound, its hand brought in contact with the vibrating parts, and in this manner a voluntary use of the voice may be established. This of course applies only to children over two years of age. Many a hearing child does not begin to speak before that time. Words and short sentences which occur so often every day, for instance, the names of members of the household, such words as "papa," "mama," "come," "go," "go out," "good-by," etc., may not only be recognized but also imitated by the child, and this imitation, be it ever so imperfect, is of the greatest value when it enters school. \* \* \*

When a child has been fortunate enough to learn to speak a few words, the gestures or signs for the objects or ideas must be abandoned, and the child taught to use the spoken word only. We must always bear in mind that gestures and signs are merely the *means* to attain the use of speech and language.

Mr. A. L. E. CROUTER, principal of the Pennsylvania Institution, issued last year, by the authority of the board of directors of that Institution, a circular of instructions to pa-

rents and guardians, the effect of which is already becoming apparent.

Mr. Crouter writes :

We see the benefits of home instruction among our new pupils. Many of them can write nicely the names of many objects, some of them can work addition, and I feel that this field can be made productive of much greater good if properly and persistently looked after.

Mr. Crouter, quoting from his circular, adds :

There is no mystery, nor is there any great difficulty in beginning the education of deaf children either by articulation or by signs. The steps to be taken are simple and can be easily understood and put into practice by almost any one who will make the attempt.

Where children have learned to speak before losing their hearing, do not on any account allow them to give up their habit of talking. Oftentimes, after they have become deaf, as it is more trouble to make them understand, those around them fall into the habit of holding less and less intercourse with them, and day by day the children talk less, until finally they lose their speech altogether. Although this may be done without any intention of unkindness on the part of the deaf child's relatives, they could not, if they tried, do him a greater or more lasting injury. Talk to the child constantly and make him talk to you. Speak every word clearly and distinctly, so clearly that the child may be able to see the words from the motion of your lips, and, although he cannot hear you, he will gradually learn to know a great many words as you speak them. And his habit of talking to you will keep up his own speech. When a hearing child begins to talk, his mother, and sisters, and brothers talk to him all the time and try to make him imitate the words spoken, repeating the same word again and again. Do the same with the deaf child, only do not talk *baby-talk*. Speak every word and every syllable slowly and distinctly, at the same time showing the object or performing the action of which you speak. Some of the best talkers and lip-readers among the deaf have been taught in this way at home.

In the case of those deaf children who have never spoken, try to teach them to recognize words by the motion of your lips. Always be careful to place yourself so that the child can have a good view of your mouth, and be sure that he knows what you are saying. For example, show him an object, such as a ball, a top, or a cup, and repeat the word many times, giving him to understand that such a movement of your lips means that thing. Although, possibly, he may never speak, yet the ability to understand those who speak to him will be an immense advantage to him. Do not be discouraged if you do not succeed at once, but keep on trying. Patience is the thing most needed.

In the case of a child who cannot speak, encourage him to use signs at as early an age as possible. When he is pleased with anything, invent a sign for the thing, and repeat the sign many times afterward. Distin-



guish different persons by signs, suggested by a mole, the beard, or any little peculiarity which the person may possess. Learn to form the letters of the manual alphabet, and teach them to the child. Hold the hand before you with the palm from you, and form each letter clearly without turning the hand or throwing it about much. Any intelligent person can take an object, as a *hat*, pick out the letters, *h, a, t*, from the manual alphabet, and learn to place the fingers in the true position for each letter. No matter how slowly it is done. Have the child imitate until he can make the letters of the word in order without assistance, and at the same time show him the object. Do this very often until the child has learned to spell the word when the hat is presented to him, or to go and bring the hat when the word is spelled to him. Then take another object, as a *pin*, and go through the same process until by frequent repetition it is thoroughly learned. Do the same with other familiar objects, such as, *dog, cat, chair, table*, etc., etc. The following ten short words, the names of common objects, contain every letter of the alphabet, viz: *adz, fan, map, cow, box, jar, sky, hat, quill, and glove*.

The child may be taught also quite early to write the names of things on a slate. To know how to write will be a great help to the child on entering school and will make his progress much more rapid. Have him imitate the form of the letters for one word, as *hat*, and repeat it many times, until he can write it as readily as spell it on his fingers. Do the same with other words. Point to each letter and require the child to make a sign for the letter on his fingers. By doing this very often the child will learn to write the names of many things and to form all the letters of the alphabet. It is best to have him make the letters as round as possible and not take off the pencil until the word is completed. After the child has learned to write many single words, begin to put them together in easy sentences. But be sure that he fully understands the meaning of each word as he writes it. Let him write his name with a verb, as *John sees*. Explain carefully the meaning of the word *sees*, and let him write after the verb the name of an object which he does see, as *John sees a table, John sees a chair*, and let him cover his slate with similar sentences, bringing in the names of the different objects in sight. Help him to objects out of the house as well as in. Encourage him to write as many as he can. All this may be the work of months, and the child's improvement may seem to you very slow, but persevere and do not be discouraged. The advantage to the child cannot be over-estimated. A little attention thus given, each day, will greatly help his mental development and make his progress more rapid upon entering the special school.

What has been said concerning the instruction of your child in language, whether spoken or written, applies with equal force to the study of numbers. Teach him simple numbers as soon as he is able to write. In doing so, make use of objects. Marbles are very convenient. With these teach him to count orally, in signs, or in writing, up to twenty. Treat each number by itself, counting out the number of marbles each

time. Then let your child count them out, or let him pick out a number for you to count. You may next teach him to add, being careful to use only the smallest numbers at first, as, *one* and *one*, *two* and *two*, *three* and *one*, *three* and *two*, etc. Use the marbles till he understands the process, and then let him add mentally. After he has been made thoroughly familiar with small combinations, it will be safe to try larger ones. Do not force the child under any circumstances; rather than do so, make no attempt in this direction at all, for it will only end in his conceiving a distaste for numbers which it will be very hard to overcome.

[Brief descriptions of many useful signs here follow in the circular.]

In conclusion, remember, if the child can speak at all, to make him speak always. Let him make known all his wants by speech. Do not let him depend upon signs when he can make himself understood otherwise. Always speak to him if he can understand you, and only make signs for what he cannot otherwise understand.

If the child cannot speak and cannot read the lips of others, write to him and have him write to you whenever possible, rather than make signs.

MISS CAROLINE A. YALE, associate principal of the Clarke Institution, sends an interesting communication in response to a request for suggestions and assistance in the preparation of this paper, from which the following extracts are taken:

CLARKE INSTITUTION FOR DEAF-MUTES, ROUND HILL,

NORTHAMPTON, MASS., *October 17, 1885.*

\* \* \* \* Experience has led me to believe that a parent may cultivate the use of signs to so great an extent during the early years of a child's life that he will fail of sufficient self-control to lay them aside later. Indeed, the child is often readier than the parent to substitute spelling or speech for signs.

Would it not be well to cite some instances of speech-reading as acquired before entering school? A case in point is that of a boy who came to us three years ago. He lost hearing and speech at two years. He had been talked to constantly until he came to us at eleven. He then understood all simple, common language from the lips—even had some notion of the "political talk" of the family, and knew something of geography. He attempted to talk a little in a very imperfect way. In three years, in school, he did the work which often occupies a child six. He learned to talk readily and plainly. He seemed always to feel that speech and speech-reading were his natural means of communication. He was, no doubt, a bright boy.

Another instance illustrates the possibilities of lip-reading on the part of the child, and at the same time of misdirected labor on the part of the family. This boy was made deaf by "spotted fever" at two years and nine months, and is said to have retained about twenty words—or at least to have known only that number after his recovery. He came to us at

fourteen. In his attempts to speak he invented strange words\* which his older sister learned and used, he reading them from her lips. Their communication was quite sufficient for all actual need, but was unintelligible to others except their mother, who also used this peculiar speech to some extent. The later speech and lip-reading of the boy were unusually good.

It ought to be a very rare occurrence that a child losing hearing at four should lose all speech; but we find it frequently the case. There are cases, too, of the "semi-deaf," where care to let the little one hear and see at the same time would take away the need of any unusual mode of communication—the hearing would be so educated that the child would be simply "hard of hearing." \* \* \*

Yours, very truly,

CAROLINE A. YALE.

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\*Miss Yale, since the above was written, has kindly made a thorough investigation of this interesting case, and has obtained this boy's vocabulary, so far as remembered by the family, after the lapse of ten years. Indistinct remembrance of sounds and imperfect speech-reading may account for the words supposed to have been "made up" by the child. The "made-up" words, so far as remembered, were *lala* for water, *biddy-biddy* for cat, *too-too* for any fowl, *pufer* for singing or for church, *himmy-himmy* for come or come here, *bobo-bobo* for clothing, (accompanied by a stroking movement on his jacket front,) *meemy* for baby, *chüchü* for chair or sit down, *feller-feller* for fire, *chō-chō* for walk, *vervü* for write or read, *boof* (prolonged, with a gesture forward) for run, *choo-choo* for hat, *go law* for "go 'long," *shooa* for shoe. The words were more indistinct than the spelling indicates.

"His vocabulary included also words spoken with some degree of plainness: horse, dog, papa, mama, mother, stop, more, water, I shant, fall, man, no sir, whoap for whoa, nassy for nasty, o dog for old dog.

"Eeshil and Soma were the names by which he called his sister Lizzie and his half-sister Saloma before his deafness. These he retained still more imperfectly.

"Certain words were after a time taught him with care—the numbers up to thirty and sofa; no others could be recalled.

"These words he put together in sentences after this fashion—*horse whoap more* for 'ride more.' I imagine that my spelling indicates too perfect speech. I judge that *haw whoap mo* would probably be more accurate.

"For animals he attempted to imitate the noises he *saw* them make. For cars he made a noise such as the vibration would suggest to him. He often tried to sing by watching his sister's throat.

"For words for which he had no name he used a sign, but usually accompanied it with a noise. A slight moan, with his hand on his stomach, indicated sickness. Water water, with a sign for fall, indicated rain."



## III.

The utility of speech-reading and the practicability of its acquisition under favorable conditions has been sufficiently intimated, but justice to the deaf requires a recognition of the fact that speech-reading has its limitations. Certain English words, chiefly short ones, are practically alike to the speech-reader and the context may fail sometimes to give a clue. It is necessary, at times, in communicating with even expert speech-readers, to have recourse to writing for spelling, the names of persons, places, technical terms, etc., not in common use. Moreover, it is convenient to have accurate and rapid means of conversation under unfavorable conditions as to light and distance, or when from any cause the deaf person's voice can not be heard.

Writing is slow, inconvenient, and often impossible. Writing upon the palm of the hand was proposed by the Abbe Deschamps in 1778 as utilizing the sense of touch, and was used in darkness by him as a substitute for speech, but it is neither accurate nor rapid. Writing in the air\* with the finger is also slow and uncertain, while the action is unpleasantly conspicuous.

Finger-spelling would appear to be a far more convenient, easy, rapid, and accurate adjunct to speech or substitute for it than writing.

It is a common error to consider the ordinary manual alphabets as deaf-mute alphabets and finger-spelling as the sign-language of the deaf. Finger-spelling is, to the deaf, a borrowed art. It is used by many of the educated deaf and their friends as a substitute for the sign-language, and it enables them also to supply the deficiencies of the sign-language by incorporating words from written language. Scagliotti, of Turin, devised a system of initial signs† which begin with letters of the manual alphabet, and Dr. Isaac Lewis Peet, of New York, has made a similar application of manual letters to

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\* The brilliant but wily Sicard, whose "show" pupils were accustomed to honoring drafts at sight in appropriate responses to all sorts of questions, acting upon the motto, *Mundus vult decipi, ergo decipitur*, schooled Massieu and Clerc in deciphering writing in the air and was thus prepared, in emergencies at his public exhibitions, to convey intimations of the answers, while supposed to be using "signs" in putting questions.

† *Quatrième Circulaire*, &c., Paris, 1836, p. 16. Carton's *Mémoire*, 1845, p. 73.

signs to suggest words of our written language to the initiated deaf. But it should not be forgotten that practise in finger-spelling is practise in our language.

The origin of finger-spelling is not known. Barrois, a distinguished orientalist, in his *Dactylogie et Langage primitif*,\* ingeniously traces evidences of finger-spelling, from the Assyrian antiquities down to the fifteenth century, upon monuments of art.

The ancient Egyptians, Greeks, and Romans were familiar with manual arithmetic and finger-numeration as John Bulwer shows by numerous citations in his quaint *Chironomia*. The earliest finger-alphabets extant appear to have been based upon finger-signs for numbers, as, for instance, that given by the venerable Bede (672-735) in his *De Loquela per Gestum Digtorum sive Indigitatione*, figured in the Ratisbon edition of 1532.† Monks and others who had special reason to prize secret and silent modes of communication, beyond doubt, invented and used many forms of finger-alphabets as well as systems of manual signs.‡ The oldest plates in the library of the National Deaf-Mute College are found in the *Thesaurus Artificiosae Memoriae* of frater Cosmas P. Rossellius of Florence, printed in 1579, which gives three forms of one-hand alphabets. Bonet's work§ of 1620 gives one form of the one-hand, Spanish manual alphabet, which contains forms identical with certain letters in the alphabets of 1579. This was introduced into France by Pereire and taught to the Abbe De l'Epée by Saboureux de

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\* Barrois: *Dactylogie et langage primitif*, Paris, 1850, Firmin Didot frères.

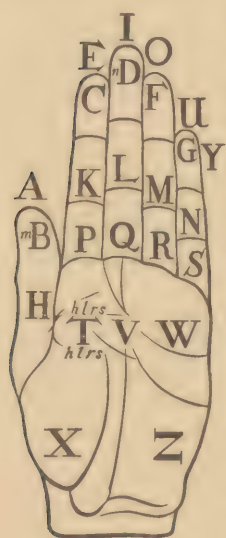
† The library of the New-York Institution contains a copy of this very rare edition bearing the title *Abarus atque vetustissima Latinorum per digitos manusque numerandi (quinetiam loquendi) consuetudo*, etc., Ratisbonae, 1532.

‡ For an exhaustive account of the gesture speech in Anglo-Saxon monasteries and of the Cistercian monks, who were under rigid vows of silence, see F. Kluge: *Zur Geschichte der Zeichensprache.—Angelsächsische indicia Monasterialia*, in *International Zeitschrift für Allgemeine Sprachwissenschaft*, II Band, I. Hälfte. Leipzig, 1885.

§ *Reduccion de las letras y arte para enseñar d hablar los mudos*, 1620.

The author is under obligations to Sr. Santos M. Robledo, of the Ministry of Public Works and Education, for advance sheets of the reprint in beautiful fac-simile of this rare work ordered by the Spanish Government in 1881.

Fontenay, the gifted pupil of Pereire. The good abbe however continued to use a French\* two-hand alphabet which he had learned when a child and which he said all school-children knew. He mentions also a Spanish alphabet in part requiring both hands and remarks that different nations have different manual alphabets. The Abbe Deschamps, a rival of De l'Epée, made use of a finger-alphabet in teaching the deaf to speak which was not adapted to rapid use. John Bulwer in his *Chirologia, or the Naturall Language of the hand*, printed in 1644, figures five manual alphabets for secret communication.



The first alphabet which appears to have been devised expressly for use in teaching the deaf is that of George Dalgarno, of Aberdeen, (1626–1687,) given in his remarkable philosophical treatise, *Didascalocophus, or the Deaf and Dumb Man's Tutor*, Oxford, 1680. By the courtesy of Mr. W. R. Cullingworth, of Philadelphia, a reduced fac-simile of Dalgarno's alphabet is here given from a plate for a projected illustrated history of the education of the deaf by Rev Henry Winter Syle, M. A. Words are spelled by touching with your finger the positions indicated, either upon your own hand or upon the hand of your interlocutor. An alphabet of the same character, however, was not unknown at an earlier date. For Bulwer in 1648, says: "A pregnant example of the

officious nature of the Touch in supplying the defect or temporall incapacity of the other senses we have in one Master *Babington* of *Burntwood* in the County of *Essex*, an ingenious Gentleman, who through some sicknesse becomming *deaf*, doth notwithstanding feele words, and as if he had an eye in his finger, sees signes in the darke: whose Wife discourseth very

\* The Abbe de l'Epée did not master the Spanish alphabet, and, attaching but little importance to manual spelling, he was unsparing in his criticism of *Messieurs the dactylologists*, but by "the irony of fate" this alphabet occupies a face of the pedestal of one statue to his memory, and in another statue the good Abbe is represented either as receiving this alphabet from the skies or as devoutly using it.



perfectly with him by a strange way of Arthrologie or Alphabet contrived on the joynts of his Fingers; who taking him by the hand in the night, can so discourse with him very exactly: for he feeling the joynts which she toucheth for letters, by them collected into words, very readily conceives what shee would suggest unto him. By which examples [referring to this case and to that of an abbot who became *deaf, dumb, and blind*, who understood writing traced upon his naked arm.] you may see how ready upon any invitation of Art, the *Tact* is, to supply the defect, and to officiate for any or all of the other senses, as being the most faithfull sense to man, being both the *Founder*, and *Vicar generall* to all the rest.”\*

Dr. Alexander Graham Bell has modified the Dalgarno alphabet, and has made considerable use of it in its modified form as figured upon page 36. He esteems it highly for certain purposes, especially as employing touch to assist the sight or to release the sight for other employment, as in reading speech for instance. Here the touch-alphabet may be an efficient aid to the sight. An objection of Dr. Kitto to the two-hand alphabet so widely known by school-children and others in Great Britain and in this country would seem to apply with greater force to the Dalgarno alphabet: “To hit the right digit on all occasions is by far the most difficult point to learn in the use of the [two-hand] manual alphabet, and it is hard to be sure which fingers have been touched.”†

It is not the purpose of the writer to attempt even a catalogue of the numerous finger-alphabets, common, tactile, phonetic, “phonomimic,” “phonodactylogie,” and syllabic, which have been proposed for the special use of the deaf.

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\* *Philosophus*: or, THE DEAFE and Dumbe Mans Friend. Exhibiting the Philosophicall verity of that subtile Art, which may inable one with an *observant Eie*, to *Heare* what any man speaks by the moving of his lips. UPON THE SAME Ground, with the advantage of an Historicall Exemplification, apparently proving, That a Man borne Deafe and Dumbe, may be taught to *Heare* the sound of *words* with his *Eie*, & thence learne to speake with his Tongue. By I. B. [John Bulwer] surnamed the *Chirofopher*. London, 1648. pp. 106, 107.

† Dr. Kitto remarks the following common mistakes in reading rapid, two-hand spelling: the confounding *i* with *e* or *o*; *d* with *p*; *l* with *t*; *f* with *x*; *r* with *t* and with one form of *j*; *n* with *v*, and adds,—“upon the whole the system is very defective and is capable of great improvement.”—*The Lost Senses*, p. 107.



[*Dr. Bell's "DALGARNO," or TOUCH, ALPHABET.*]

The one-hand alphabet used by Ponce and figured by Bonet, was common in Spanish almanacs hawked by ballad-mongers upon the streets of Madrid in the days of De l'Épée, and although rejected by him, it was adopted by his pupils. This with slight modifications became the French manual alphabet which was introduced at Hartford by Dr. Thomas Hopkins Gallaudet.\* This alphabet is known in almost every hamlet in the land. Slight changes in the form of certain letters, or in the position of the hand, in the direction of greater perspicuity and capacity for rapid use, have taken place gradually, though there is no absolute uniformity of usage among instructors or pupils.

This "American" alphabet as here presented on pages 39-41, through the liberality of Dr. A. Graham Bell, has been drawn and engraved from photographs, and represents typical positions of the fingers, hand, and fore-arm from a uniform point of view in front of the person spelling, or as seen in a large mirror by the user himself.

This alphabet can be learned in less than an hour, and many have learned it by extraordinary application in ten minutes. It is recommended that the arm be held in an easy position near the body, with the fore-arm as in the plates. Each letter should be mastered before leaving it. Speed will come with use; it should not be attempted nor permitted until the forms of the letters and the appropriate positions of the hand are thoroughly familiar. The forms as given are legible from the distant parts of a public hall. In colloquial use the fingers need not be so closely held, nor firmly flexed, as represented, but sprawling should be avoided. It is not necessary to move the arm, but a slight leverage at the elbow is conducive to ease and is permissible, provided the hand delivers the letters steadily within an imaginary immovable ring of, say, ten inches in diameter.†

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\* REV. THOMAS HOPKINS GALLAUDET, LL. D., (1787-1851,) is held in loving remembrance, and a national committee, (of which T. A. Froelich, 150 E. 75th st., New York, is Chairman, and Prof. A. G. Draper, of Kendall Green, Washington, D. C., is Treasurer,) representing the "deaf-mutes" of America and their friends, is receiving contributions for a bronze statue of this man of God who loved his fellow-men more than he loved himself. The centennial anniversary of Dr. T. H. Gallaudet's birth will be fittingly commemorated by placing this statue in a quiet nook upon Kendall Green.

† For further useful directions in learning this alphabet see page 29.



This adjunct to speech-reading is recommended for its convenience, clearness, rapidity, and ease in colloquial use, as well as for its value as an educational instrument in impressing words, phrases, and sentences in their spelled form upon the mind, in testing the comprehension of children, and in affording by easy steps a substitute for the sign-language.

In the simultaneous instruction of large classes not able to follow speech, finger-spelling "may take the place of signs to a great extent in the definition, explanation, and illustration of single words and phrases, and in questions and answers upon the lessons, and in communications of every kind to which the stock of language already acquired may be adequate."

All who have anything to do with the school-instruction of the deaf may well bear in mind the matured opinion and wise counsel of Professor Samuel Porter, of the National College, the Nestor of American instructors. In this connection, Professor Porter says :

*In short, let the gestural signs come in only as a last resort, or, so far as possible, merely as supplementary to words, reinforcing them in some instances, or employed as a test of the pupil's knowledge of words, but always, so far as possible, falling behind and taking a subordinate place. And let the pupils be required, in what they have to say to their teachers in the school-room or elsewhere, to employ the finger-alphabet instead of natural signs to the utmost possible extent, and this by complete sentences and not in a fragmentary way.*





M. JONES, WASH. D. C.

[The one-hand Alphabet in general use.—Front view.]



M. JOYCE, WASH. D. C.

[The one-hand Alphabet in general use.—Front view.]





[The one-hand Alphabet in general use.—Front view.]



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E. A. FAY,  
*National Deaf-Mute College,*  
*Kendall Green,*  
WASHINGTON, D. C.